

MULTIUSER DETECTION AIDED MULTIPLE ACCESS DIFFERENTIAL M-ARY CODING APPLICATIONS

ABSTRACT OF THE DISCLOSURE

[0061] Techniques for multiple access differential M-ary coding applications that can be optionally aided by multiuser detection (MUD) are disclosed. An initial 'hopped' feature decoding is performed to provide data estimates for each user represented in a received co-channel signal. Interference cancellation can then be performed using MUD, thereby providing an interference-cancelled signal. Data estimates remaining are then re-decoded. Iteration on the interference cancellation and re-decoding can be carried out to satisfy a particular rule of iteration, although iteration is not always necessary. The final decoded signal can then be provided to its destination.